

comprising the display by limiting the amount of current flowing through the entire array or, optionally, through the individual array strings. Current limiter 906 may comprise a plurality of resistors arranged in series with each of the individual array strings. Optionally, current limiter 906 may be as described in copending patent application Serial No. 09/834,277

5 entitled: "Apparatus and Method for Controlling LED Arrays," filed the same day herewith and incorporated by reference; and as also described in copending patent application Serial No. 60/237,876, entitled: "High Precision, High Efficiency Dimming Controller for LED Arrays," also incorporated by reference.

Also according to the present invention, n bit modulator 916 is coupled to an  
10 additional timer 918 that can be used to generate  $K = 2^n$  states. Modulator 916 is additionally coupled to a computing device 920 which may comprise a cpu, programmable logic device or other general purpose processor, analog or digital logic circuit. Computing device 920 may additionally include memory for storing code such as, for example, that described by Fig. 8 useful for assigning a modulator output to each of the K timer states of  
15 timer 918, wherein said code is executed by computing device 920. Computing device 920 may optionally include timer 918 or be able to assert interrupts using an internal clock to thereby function as timer 918.

The invention has now been described with reference to the preferred  
embodiments. Variations and modifications will be readily apparent to those of ordinary skill  
20 in the art. For these reasons, the invention is to be interpreted in view of the claims.